(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/002331 A1

(51) International Patent Classification[7]: A01K 63/04, C02F 3/06, 3/28, 3/12, 3/00

(21) International Application Number: PCT/NL2004/000455

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language: Dutch

(26) Publication Language: English

(30) Priority Data:
1023818 3 July 2003 (03.07.2003) NL
1025227 13 January 2004 (13.01.2004) NL

(71) Applicant (*for all designated States except US*): GIELES TRUST B.V. [NL/NL]; Hansenberg 6, NL-5815 EJ Merselo (NL).

(72) Inventors; and

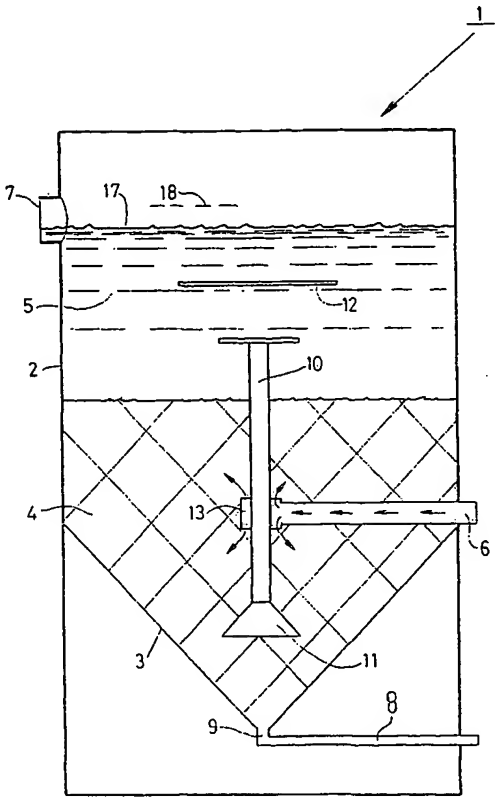
(75) Inventors/Applicants (*for US only*): GIELES, Johny, Bernard [NL/NL]; Hansenberg 6, NL-5815 EJ Merselo (NL). DONKERS, Johannes, Jacobus, Gerardus, Maria [NL/NL]; Pastoor Castellijnsstraat 49, NL-5423 SP Handel (NL).

(74) Agents: DOHMEN, Johannes, Maria, Gerardus et al.; Algemeen Octrooi- en Merkenbureau, P.O. Box 645, NL-5600 AP Eindhoven (NL).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: DEVICE FOR REMOVING IMPURITIES FROM A LIQUID



(57) Abstract: The invention relates to a device for removing impurities from a liquid, comprising a reservoir (2) for holding filtering material (4) at the bottom side (3) thereof on the one hand and a liquid, in particular at the upper side above the filtering material, on the other hand, a liquid supply channel (6) opening into the bottom side of the reservoir for supplying liquid to be purified to the reservoir via liquid displacement means, a first liquid discharge channel (14) extending from the upper side of the reservoir for discharging purified liquid from the reservoir and a fluid supply channel (8) opening into the bottom side of the reservoir for causing turbulence in filtering material present in the liquid at regular intervals by supplying a fluid, using fluid displacement means, and thus detaching impurities from said filtering material, A pipe (10) comprising a first end positioned at the bottom side of the reservoir and a second end positioned opposite said first end is provided in the reservoir, spaced from the mouth of the fluid supply channel by some distance, for the passage of a fluid supplied to the reservoir via the fluid supply channel (8).

WO 2005/002331 A1

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.